

The recording of unfunded pensions of employees of Australian governments in government accounts and economic statistics

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1. Introduction

One of the features of the updated *System of National Accounts* (SNA) – SNA Rev. 1 – is its enhanced treatment of unfunded pension liabilities. In the 1993 SNA, liabilities for such pensions (and the counterpart assets) are not recorded in the system's balance sheets. However, in the update, liabilities and the counterpart assets can now be recorded. This is welcome news for Australia. The Australian national accounts and government finance statistics (GFS), produced by the Australian Bureau of Statistics (ABS), have recorded the unfunded pension liabilities of governments and the counterpart unfunded pension assets of households since the introduction of SNA93 in Australia in 1998. While this treatment was not consistent with the recommendations of the SNA, the view in Australia has been that these liabilities are actual liabilities of governments, and the issue of whether they are funded or not is not particularly relevant in establishing this position. Interestingly, this view is not only strongly held by the economic statisticians in Australia, it is also strongly held by the governments themselves, the parliaments to which the governments are accountable, and the users of the national accounts and GFS.

In a number of countries, there is concern about the boundary between social security and government employee pension schemes. This is not an issue of concern for Australia, as we do not have any social security schemes in the SNA sense.

2. Government employee pension schemes in Australia

By way of background, Australia is a federation. There is a central federal government, known as the Commonwealth government or the Australian government. There are six states (and two territories that are quite similar to states), each with its own government. Collectively, the Commonwealth government and the six state and two territory governments are known as the "jurisdictions".²

Both defined benefit and defined contribution employee pension schemes exist in Australia. The latter type covers the majority of private sector employees. Government employees are typically covered by the former type, although this is not universally so. Some government schemes are a mixture of both types.

In Australia, a range of different types of pension schemes exists to provide retirement income for general government employees. Most governments operate, or used to operate, pension schemes for their employees that are unfunded or only partly funded. A number of general government schemes have one component funded through direct employee

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² The term "state government" is generally used to cover both state and territory governments.

contributions, and another (the employer's contribution) that is unfunded. Under such schemes, employee contributions plus investment returns are redeemed upon retirement date, with employer contributions paid in the form of a pension. Other general government schemes comprise only an unfunded employer component. Increasingly, pension schemes for general government employees in Australia are becoming fully funded. The main schemes for the largest general government employer, the Commonwealth government, remain unfunded, except for new employees after July 2005. Typically, defined benefit schemes operated by Australian governments are unfunded, whereas defined contribution schemes are funded.

3. Australian national accounts and GFS treatment of defined benefit pension schemes

The starting point for the Australian national accounts and GFS treatment of defined benefit pension schemes is actuarial based estimates of the net present value of unfunded employee pension liabilities and the associated flows. This information is available from the accounts of the jurisdictions themselves.

The change in the liability position (flows) from one period to the next is disaggregated into the following components:

- imputed employer contributions for new and existing employees
- *plus* imputed property income on the outstanding liability to pay pensions
- *plus* revaluations
- *plus* revisions due to changes in actuarial assumptions and benefits payable
- *less* pensions paid

The recording in the national accounts is as follows:

1. Unfunded pension claims are recorded as a liability on the balance sheet of the general government sector and as an asset on the balance sheet of the household sector.
2. Imputed employer contributions are recorded as compensation of employees in the income accounts of the general government and household sectors and as government final consumption expenditure in the use of income account.
3. Imputed property income (interest) flows are recorded in the income accounts of the general government and household sectors.
4. Changes in technical reserves (imputed employer contributions plus property income less pensions paid) are recorded as the incurrence of a liability in the financial account of general government and an acquisition of a financial asset in the financial account of households.
5. Revaluations (for example, arising from changes to the discount rate) and changes in actuarial assumptions and/or defined benefits are recorded in the other changes in assets accounts.

In the income accounts, Australia does not record the pension benefits and (imputed) contributions and the resultant adjustment for the change of net equity of households in pension funds.

In GFS, a similar recording is adopted, with imputed employer contributions and property income recorded as expenses in the operating statement.

To understand the significance of the recording of government unfunded pension schemes in Australia, at 30 June 2006 the value of these liabilities for all governments stood at AUD 202,736 million,³ or about 55% of the total liabilities for the general government sector.⁴ During 2005–06, the amounts recorded for all governments for the imputed employer contributions and interest flows were AUD 5,815 and AUD 8,485, respectively (1.7% and 2.2%, respectively, of total general government expenses).

4. Availability of data from public accounts

In Australia, the Commonwealth Government, the six state and two territory governments, as well as the 750 or so individual local government authorities, each prepare financial information on the net present value of future benefits and associated flows for budgeting and financial reporting purposes. Financial reporting is also required under Australian Accounting Standards, issued by the Australian Accounting Standards Board. In addition to the information normally available from the public accounts prepared under each government's finance, audit and similar legislative requirements, the Commonwealth and state governments also have an inter-governmental agreement to publish, as part of their budget or related documentation, a core set of uniform financial information based on GFS concepts. The Australian Bureau of Statistics, though not formally a signatory to the inter-governmental agreement, plays a key role in ensuring this uniformity as well as conformity to the GFS standards.⁵

In relation to their respective defined benefit scheme(s), each government has readily acknowledged the legal and contractual nature of its obligation; hence the on-balance sheet nature of its liability has never been under contention. As a result of this acknowledgement and the financial reporting referred to above – especially the reporting on a uniform basis – the key data items relating to the public sector defined benefit schemes are readily available. The estimates of the unfunded liability for defined benefit schemes are regularly available as independently audited information. Moreover, independent professional actuaries also undertake regular reviews of the schemes, typically triennially.

The data items available include: accrued employer contributions (in respect of the current service of employees), cash payments (in respect of the past service of retired employees), imputed property income flows, actuarial adjustments and opening and closing liability balances.

Governments record pension funds in their own accounts, according to Australian Accounting Standard AASB 119 *Employee Benefits*, which is based on and consistent with International Accounting Standard IAS 19. (In Australia, governments are obliged to use the same standards for accounting as businesses, where the business standards are relevant.) The governments have decided not to allow the “corridor” option for dealing with actuarial gains and losses, in order to maximise harmonisation with GFS requirements. The discount rate is fundamental to the calculation of the outstanding liability, service flows and interest costs. All jurisdictions use the Commonwealth Government long-term bond rate as their discount rate.

³ About USD 165,000 million.

⁴ The next largest component of general government liabilities for all governments was borrowing of AUD 95,724.

⁵ These GFS statements produced by the various governments may and do differ from GFS statements that are produced by the ABS, as the ABS reserves the right to prepare GFS statistics that are independent from government. The ABS GFS statements are Australia's “official” GFS statistics.

The method used by all jurisdictions to derive estimates of their unfunded liability is the “projected unit credit method”. In this method, the same proportion of the estimated final benefit payable is allocated to each year of service.

5. Data required to estimate unfunded pension liabilities and associated flows

Where data relating to a government’s defined benefit employee pension scheme is not available from a government’s own accounting records, it may still be possible to compile estimates of the unfunded pension liabilities and the associated flows. The process would require a large volume of input data that would need to be manipulated systematically over multiple periods, with complex calculations and with the output being sensitive to assumptions. However, trained actuaries should be able to readily take the input data and derive estimates. Also, despite any uncertainties inherent in a model-based estimate in the national accounts, it could be expected that the resulting estimates represent a far superior reflection of the true fiscal and economic situation facing governments than a cash-based accounting.

In a defined benefit scheme, the benefits payable on retirement are usually promised or predefined by some formula. The key parameters of the formula are normally the employee’s length of service and retirement salary. The nominal values of the total retirement benefits to be paid in the future can be calculated based on assumptions such as expected retirement ages, mortality rates, expected inflation, and expected salary increases. As the calculation would be highly sensitive to these assumptions, they need to be soundly based and regularly reviewed and updated.

The nominal values derived above can then be converted to their present values using an appropriate discount rate, such as that reflecting the particular government’s long-term borrowing rate. This present value represents the accrued gross liability at the end of a period in question. In effect, this accrued liability represents the employees’ pension entitlements in respect of service already provided to the government.

Over successive accounting periods, the total liability of the pension scheme would change because of the accrual of additional contributions, the payment of benefits to pensioners, changes in the assumptions or variables, and the passage of time. The imputed property expense for a period can be calculated as equal to the increase in the liability resulting from the passage of time, which occurs because the future benefits are discounted over one less accounting period. As unfunded liabilities essentially represent borrowings by the employer from employees, then the general cost of borrowing for the employer should be used to determine the discount rate. In the case of government, for example, an appropriate rate would be the long-term bond rate.

The change in the liability due to changes in assumptions or variables (commonly referred to as actuarial revaluations in accounting terms) may be in the nature of revaluations or other change in the volume of assets.